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REMARKS

Claims 1-22 are pending in this application. By this amendment, Applicants add claims 21 and 22.

Claims 1-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kuriyama et al. (U.S. 6,068,499). This rejection is respectfully traversed.

Claim 1 recites:

"An electronic component comprising:
an insulative case;
a plurality of surface-mounting terminals mounted on said insulative case;
at least one notch provided in and extending entirely through said insulative case in a thickness direction from a top surface to a bottom surface thereof to accommodate a lead portion of at least one of said plurality of surface-mounting terminals; and
said notch providing a clearance between said insulative case and said lead portion of said at least one of said plurality of surface-mounting terminals to prevent the occurrence of capillary effect of solder applied to said electronic component." (Emphasis added)

Claim 12 recites features that are similar to claim 1, including the emphasized features.

The Examiner again alleged that Kuriyama et al. teaches all of the features recited in claims 1 and 12 of the present application except for the notch "extending entirely through said insulative case in a thickness direction from a top surface to a bottom surface thereof". However, the Examiner alleged that "to extend the notch entirely through the insulative case would have been an obvious matter of design lacking criticality, since the function performed by the notch is the same." Applicants respectfully disagree.

As clearly seen in Fig. 1 of Kuriyama et al., although the notch on the bottom of case 2 provides some clearance on the sides of connection ends 11, 12, there is absolutely **NO** clearance between the case element 2 and the vertical portions of the fixed and movable terminals 4, 5, as clearly seen in Fig. 1, and, in fact, the vertical portions of the fixed and movable terminals 4, 5 are **in contact** with the case 2. Thus, contrary to the Examiner's allegation, the notch on the bottom surface of the case

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element 2a would **NOT** "prevent the occurrence of capillary effect of solder applied to said electronic component" because capillary effect would occur between the vertical portions of the fixed and movable terminals 4, 5 and the case 2 since the vertical portions of the fixed and movable terminals 4, 5 and the case 2 are clearly in contact with one another.

Therefore, contrary to the Examiner's allegation, the arrangement and function performed by the notch of Kuriyama et al. are clearly **NOT** the same as the notch "extending entirely through said insulative case in a thickness direction from a top surface to a bottom surface thereof" as recited in claim 1 of the present application. Since the notch of Kuriyama et al. is arranged differently and clearly fails to perform the same function as the notch of the present claimed invention, Applicants respectfully submit that it would not have been a matter of design choice to modify the notch of Kuriyama et al. to extend entirely through the insulative case in a thickness direction. In addition, it is improper to base a conclusion of obviousness on an allegation of design choice. The U.S. Patent Office Board of Patent Appeals and Interferences has concluded that a rejection based on design choice is clearly improper. See *In re Garrett*, Appeal No. 580-81 (BPAI 1986), wherein in reversing an obviousness rejection, the Board criticized that the Examiner's statement that the proposed modification would have been an obvious matter of engineering design choice with the explanation that such an assertion is a conclusion, not a reason.

In addition, the Examiner continues to allege that the notch of Kuriyama et al. prevents capillary effect of solder applied to the electronic component. However, there is absolutely **NO** teaching or suggestion in Kuriyama et al. that the notch would or could prevent capillary effect of solder applied to the electronic component, as alleged by the Examiner. In fact, the arrangement of the terminal electrodes and the insulative case clearly would **NOT** prevent capillary effect of the solder because the portions of the terminal electrodes which are in contact with the insulative case would **promote** capillary effect, not **prevent** it.

In the Response to Arguments section of the outstanding Office Action, the Examiner further alleged that "the extension of the notch at the full thickness of the

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insulative case is not patentably significant since they relate to the size of the article under consideration which is not ordinarily a matter of invention." This allegation is completely not supported by any evidence on the record and without any technical merit whatsoever.

In contrast to the Examiner's allegation, the extension of the notch of Kuriyama et al. clearly does **NOT** merely relate to the size of the article under consideration. In fact, if the notch of Kuriyama et al. were modified to extend entirely through the insulative case as alleged by the Examiner, the fixed and movable terminals would be completely inoperative. The only structure provided in the connector of Kuriyama et al. to mount and fix the fixed and movable terminals within the insulative case is the upper portion of the notch which extends to the upper surface of the insulative case as seen in Fig. 1. Thus, if the notch of Kuriyama et al. was modified to extend entirely through the insulative case, the connector of Kuriyama et al. would not include any structure for mounting and fixing the fixed and movable terminals, and thus, the connector would be inoperative.

In fact, Kuriyama et al. teaches away from a notch which extends entirely through the insulative case, since the connector of Kuriyama et al. would be inoperative if modified to include such a notch. Accordingly, Kuriyama et al. cannot be relied upon in an obviousness rejection of Applicants' claimed invention since it is error to find obviousness where references diverge and teach away from the invention at hand. W.L. Gore & Assoc. v. Garlock Inc., 721 F .2d 1540, 1550, 220 USPQ 303, 311 (Fed. Cir. 1983).

The Examiner further alleged that "in Kuriyama, the elimination of the part of the notch, which serves to prevent forming the capillary effect is an obvious expedient since it has been held that omission of an element and its function in a combination where the remaining elements perform the same functions as before involves only routine skill in the art." As described above, the omission of a portion of the notch such that the notch extends entirely through the insulative case of Kuriyama et al. would cause the connector to be inoperative, and thus, the connector of Kuriyama et al. would clearly **NOT** function as intended. Accordingly, Applicant respectfully submits that to modify

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Kuriyama et al. as alleged by the Examiner would have required more than routine skill, and thus, such a modification would clearly not have been obvious.

The PTO has the burden under 35 U.S.C. §103 to establish a prima facie case of obviousness. See In re Piasecki, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984). The PTO can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1984). This it has not done. The Examiner failed to cite prior art that remedies the deficiencies of Kuriyama et al. or that suggests the obviousness of modifying Kuriyama et al. to achieve Applicant's claimed invention.

Instead, the Examiner improperly relied upon hindsight-reconstruction of the claimed invention in reaching his obviousness determination. To imbue one of ordinary skill in the art with knowledge of the invention, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher. W.L. Gore & Assoc. v. Garlock, Inc., 721 F.2d 1540, 1543, 220 USPQ 303, 312-13 (Fed. Cir. 1983).

Prior art rejections must be based on evidence. Graham v. John Deere Co., 383 U.S. 117 (1966). Pursuant to MPEP 706.02(a), the Examiner is hereby requested to cite a reference in support of his position that it was well known at the time of Applicants' invention to provide "at least one notch provided in and extending entirely through said insulative case in a thickness direction from a top surface to a bottom surface thereof to accommodate a lead portion of at least one of said plurality of surface-mounting terminals" and "said notch providing a clearance between said insulative case and said lead portion of said at least one of said plurality of surface-mounting terminals to prevent the occurrence of capillary effect of solder applied to said electronic component" as recited in the present claimed invention. If the rejection is based on facts within the personal knowledge of the Examiner, the data should be supported as specifically as possible and the rejection must be supported by an affidavit

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from the Examiner, which would be subject to contradiction or explanation by affidavit of Applicants or other persons. See 37 C.F.R. §1.104(d)(2).

At best, the Examiner's comments regarding obviousness amount to an assertion that one of ordinary skill in the relevant art would have been able to arrive at Applicant's invention because he had the necessary skills to produce the requisite elements. This is an inappropriate standard for obviousness. That which is within the capabilities of one skilled in the art is not synonymous with obviousness. See Ex Parte Levengood, 28 USPQ 2d 1300 (Bd. Pat. App. & Inter. 1993). The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification. In re Gordon, 221 USPQ 1125 (Fed. Cir. 1984). As noted above, the prior art clearly teaches away from the modification proposed by the Examiner, instead of suggesting the modification, since the modification proposed by the Examiner would destroy the operability of the prior art device.

Accordingly, Applicants respectfully submit that Kuriyama fails to teach or suggest the unique combination and arrangement of elements recited in claims 1 and 12 of the present invention.

In view of the foregoing amendments and remarks, Applicants respectfully submit that claims 1 and 12 are allowable. Claims 2-11 and 13-22 depend upon claims 1 and 12, and are therefore allowable for at least the reasons that claims 1 and 12 are allowable.

In view of the foregoing Remarks, Applicants respectfully submit that this application is in condition for allowance. Favorable consideration and prompt allowance are respectfully solicited.

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The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,


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